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DOCKET NO. 0001.1166

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Kyung-Geun LEE et al.

Serial No: 10/587,570

Group Art Unit: 2627

Confirmation No. 9502

Filed: July 31, 2006

Examiner:

For:

INFORMATION STORAGE MEDIUM STORING DIFFERENT READ POWER

INFORMATION

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

It is requested that the total number of claims and the number of independent claims on the Official Filing Receipt be corrected. The correct total number of claims is **14**, as is evidenced by the Preliminary Amendment and the Transmittal Letter to the United States

Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371, attached to the application as filed. The correct number of independent claims is **3**, as is evidenced by the Preliminary Amendment and the Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371, attached to the application as filed. For the convenience of the Patent and Trademark Office, attached is a photocopy of the original receipt on which the errors have been noted in red.

It is requested that a corrected Official Filing Receipt be issued in this application.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

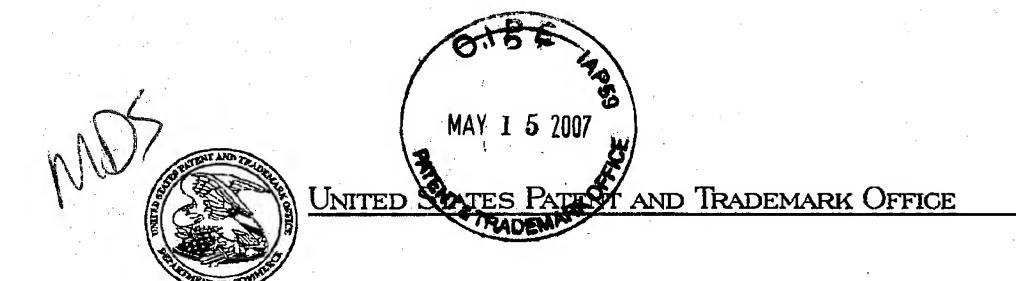
Michael D. Stein

Registration No. 37,240

1400 Eye St., N.W.

Suite 300

Washington, D.C. 20005 Telephone: (202) 216-9505 Facsimile: (202) 216-9510



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

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FILING OR 371(c) APPL NO. IND CLMS **ART UNIT** FIL FEE REC'D TOT CLMS ATTY.DOCKET NO DATE 0001.1166 2627 900 07/31/2006 10/587,570

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CONFIRMATION NO. 9502

FILING RECEIPT

OC000000023115983

Date Mailed: 03/27/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

49455

SUITE 300

STEIN, MCEWEN & BUI, LLP

1400 EYE STREET, NW

WASHINGTON, DC 20005

Kyung-Geun Lee, Seongnam-si, KOREA, REPUBLIC OF; Joo-Ho Kim, Yongin-si, KOREA, REPUBLIC OF; In-Oh Hwang, Seongnam-si, KOREA, REPUBLIC OF; Hyun-Ki Kim, Hwaseong-si, KOREA, REPUBLIC OF;

Power of Attorney: The patent practitioners associated with Customer Number 49455.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/KR05/00739 03/15/2005

Foreign Applications

REPUBLIC OF KOREA 10-2004-0017255 03/15/2004

If Required, Foreign Filing License Granted: 03/26/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/587,570**

Projected Publication Date: 07/05/2007

Non-Publication Request: No

Early Publication Request: No

Title

Information storage medium storing different read power information

Preliminary Class

369

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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FORM PTO-1390 (10/03)

TRANSMITTAL LETTER DESIGNATED/ELECT	R TO THE UNITED STATES FED OFFICE (DO/EO/US) NG UNDER 35 U.S.C. 371	ATTORNEY'S DOCKET NUMBER 0001.1166					
INTERNATIONAL APPLICATION NO. PCT/KR2005/000739	INTERNATIONAL FILING DATE March 15, 2005	PRIORITY DATE CLAIMED March 15, 2004					
TITLE OF INVENTION INFORMATION STORING DIFFERENT READ POWER INFORMATION							
APPLICANT(S) FOR DO/EO/US Kyung-Geun LEE et al.							
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:							
 This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. This is an express request to immediately begin national examination procedures (35 U.S.C. 371(f)). 							
 3. The US has been elected by the expiration of 19 months from the priority date (PCT Article 31). 4. A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. is transmitted herewith (required only if not transmitted by the International Bureau). b. has been transmitted by the International Bureau. c. is not required, as the application was filed in the United States Receiving Office (RO/US). 5. A translation of the International Application into English (35 U.S.C. 371(c)(2)). 							
 Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. are transmitted herewith (required only if not transmitted by the International Bureau). b. have been transmitted by the International Bureau. c. is not required, as the application was filed in the United States Receiving Office (RO/US) 7. A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 8. An oath or declaration of the inventor (35 U.S.C. 371(c)(4)). 9. A translation of the Annexes to the International Preliminary Examination Report under PCT 							
Article 36 (35 U.S.C. 371(c)(5)). Items 10-15 below concern document(s) or information included:							
 10. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 11. ☐ An assignment document for recording. Please mail the recorded assignment document to: a. ☐ the person whose signature, name & address appears at the bottom of this document. b. ☐ the following: 12. ☐ A preliminary amendment with Replacement Sheets for drawings. 13. ☐ A substitute specification (marked-up and clean versions). 14. ☐ A change of power of attorney and/or address letter. 15. ☐ Other items or information: Copies of the following papers: PCT/IB/301, PCT/IB/304, PCT/IB/306, PCT/IB/311 and International Publication WO 2006/004250 							

The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees as follows:							
CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS		
	TOTAL CLAIMS	14 -20=	0	x \$ 50.00	\$ 0.00		
	INDEPENDENT CLAIMS	3 -3=	0	x \$ 200.00	\$ 0.00		
70	MULTIPLE DEPE	\$ 0.00					
	BASIC FILING FEE				\$ 300.00		
	EXAMINATION F	\$ 200.00					
	SEARCH FEE If the written opinion examination reportations of PCT Search fee (37 CFR application to the International Search provided to the Other situations	\$ 400.00					
	Surcharge Fee fo	\$ 0.00					
. 0	Total of ab	\$ 900.00					
	Surcharge of \$130						
			TOTAL OF ABOVE CALCULATIONS	Ξ	\$ 900.00		
	Reduction by 1/2 filed also. (Note 3						
	SUBTOTAL				\$ 900.00		
	Processing fee of [] 20 [] 30 mos. f						
	TOTAL NATIONAL FEE				\$ 900.00		
	Fee for recording the enclosed assignment (37 CFR 1.21(h)).				+ \$40.00		
		\$ 940.00					
 a. A check in the amount of \$ to cover the above fees is enclosed. b. Credit Card Payment Form, Form PTO-2038 (attached). c. Please charge my Deposit Account No. 503333 in the Amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. d. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 503333. A duplicate copy of this sheet is enclosed. STEIN, MCEWEN & BUI, LLP 49,455 							
PATENT TRADEMARK OFFICE							
SUBMITTED BY: STEIN, MCEWEN & BUI, LLP							
Type Na	me	Michael D. Stein	<i>A</i>	Reg. No.	37,240		
Signature		Mulae O X	at	Date	7/31/06		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Kyung-Geun LEE et al.

Serial No.: Not Yet Assigned Group Art Unit: Not Yet Assigned.

Intl. Appln. No.: PCT/KR2005/000739 Intl. Appln. Filed: March 15, 2005

Filed (U.S.): July 31, 2006 Examiner: Not Yet Assigned

For: INFORMATION STORAGE MEDIUM STORING DIFFERENT READ POWER

INFORMATION (As Amended)

PRELIMINARY AMENDMENT

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The following amendments and remarks are respectfully submitted prior to examination of the accompanying national stage application identified above.

Amendments to the title begin on page 2 of this paper.

Amendments to the abstract begin on page 3 of this paper.

Amendments to the specification begin on page 5 of this paper.

Amendments to the drawings begin on page 6 of this paper.

Amendments to the claims are reflected in the listing of the claims that begins on page 7 of this paper.

Remarks begin on page 11 of this paper.

A Substitute Specification (Clean Version Without Markings), a Substitute Specification (With Markings), and four replacement sheets of drawings are attached following page 13 of this paper.

IN THE TITLE:

The title as amended below with a replacement title shows added text with <u>underlining</u> and deleted text with <u>strikethrough</u>.

Please REPLACE the original title with the following amended title:

INFORMATION STORAGE MEDIUM HAVING STORING DIFFERENT READ POWER INFORMATION

IN THE ABSTRACT:

The abstract as amended on the following page with a replacement abstract shows added text with <u>underlining</u> and deleted text with <u>strikethrough</u>.

Please REPLACE the original abstract with the amended abstract on the following page.

ABSTRACT

A hybrid information storage medium eemprises includes a lead-in area storing basic information regarding the information storage medium, a lead-out area indicating an end of the information storage medium, and a plurality of types of data areas requiring different optimal read powers, and wherein different optimal read power information respectively specifying the different optimal read powers for the plurality of types of data areas are recorded on the information recording medium. Accordingly, since optimal optimal read power information for each area of a plurality of data areas of a hybrid super-resolution optical disk requiring different optimal read powers is provided to an optical disc disk drive when the optical disc disk drive reproduces data from a the hybrid super-resolution optical disk including a plurality of types of data areas requiring different optimal read powers, so that optimal reproduction characteristics can always reliably be obtained reliably.

IN THE SPECIFICATION:

Please REPLACE the original specification with the attached substitute specification (clean version without markings).

AMENDMENTS TO THE DRAWINGS:

Four replacement sheets of drawings containing FIGS. 1A-1C and 2-6 are attached to this paper and include changes to FIGS. 2, 4, and 6. These changes are discussed below in the remarks. No changes were made to FIGS. 1A-1C, 3, and 5.

The replacement sheet containing FIGS. 1A-1C replaces the original sheet of drawings containing FIGS. 1A-1C.

The replacement sheet containing FIGS. 2-3 replaces the original sheet of drawings containing FIGS. 2-3.

The replacement sheet of drawings containing FIG. 4 replaces the original sheet of drawings containing FIG. 4.

The replacement sheet of drawings containing FIGS. 5-6 replaces the original sheet of drawings containing FIGS. 5-6.

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please AMEND original claims 1-9 and ADD new claims 10-14 in accordance with the following:

- 1. (Currently amended) An information storage medium comprising:
- a lead-in area storing basic information regarding the information storage medium;
- a lead-out area indicating an end of the information storage medium; and
- a plurality of types of data areas requiring different optimal read powers; and

wherein different optimal read power information respectively specifying the different optimal read powers for the plurality of types of data areas are recorded on the information storage medium.

- 2. (Currently amended) The information storage medium of claim 1, wherein the different optimal read power information is are recorded in at least one of the lead-in area and and/or the lead-out area.
- 3. (Currently amended) The information storage medium of claim 2, wherein the lead-in area comprises a control data zone;

wherein the control data zone comprises a plurality of reserved fields; and wherein the different optimal read power information is are respectively recorded in arbitrary ones of the reserved fields within a of the control data zone in the lead in area.

4. (Currently amended) The information storage medium of claim-3_1, wherein the different optimal read power information is are respectively recorded in one-byte units; of 1 byte, wherein each of the one-byte units comprises eight bits;

wherein four most significant bits among 1-byte optimal read power information of the eight bits of each of the one-byte units express an integer part of an-a respective one of the different optimal read power, powers specified by a respective one of the different optimal read power information recorded in the one-byte unit; and

wherein four least significant bits among the 1-byte optimal read power information of the eight bits of each of the one-byte units express a fraction part of a respective one of the different optimal read power powers specified by a respective one of the different optimal read power information recorded in the one-byte unit.

- 5. (Currently amended) The information storage medium of claim—3_1, wherein the different optimal read power information is are recorded in a form of pits as prepits or groove-wobbles wobble grooves to prevent the different optimal read power information from being changed when user data is recorded on the information storage medium.
- 6. (Currently amended) The information storage medium of claim 1, wherein the plurality of types of data areas comprise an a super-resolution area on/from which information is recorded/reproduced on/from according to using a super-resolution principle effect.
- 7. (Currently amended) A method of recording/reproducing data on/from a hybrid information storage medium, including the hybrid information storage medium comprising a plurality of types of data areas requiring different optimal read powers, according to different optimal read power information recorded on the hybrid information storage medium, the method comprising:

recording the different optimal read power information respectively specifying the different optimal read powers for the plurality of types of data areas on the hybrid information storage medium;

reading <u>all of</u> the different optimal read power information for each data area from the hybrid information storage medium; and

reproducing data from <u>any type of</u> the <u>plurality of types of</u> data <u>area with an areas using a respective one of the different optimal read power powers specified by a respective one of the different optimal read power information corresponding to the <u>a type of a data area from which data is to be reproduced</u>.</u>

8. (Currently amended) The method of claim 7, wherein the hybrid information storage medium comprises a lead-in area and a lead-out area; and

wherein the different optimal read power information is are recorded in at least one of a the lead-in area and a and/or the lead-out area on the hybrid information storage medium.

9. (Currently amended) The method of claim 7, wherein the reproducing of data comprises:

determining a type of the <u>a</u> data area from which the data is to be reproduced; and controlling an output <u>power</u> of a laser diode according to an <u>be a respective one of the different optimal read power powers specified by a respective one of the different optimal read <u>power information</u> corresponding to <u>a result of the determination</u> the type of the data area from which data is to be reproduced; and</u>

reproducing data from the data area from which data is to be reproduced using a light beam emitted from the laser diode.

10. (New) An apparatus that reproduces data from an information storage medium, the information storage medium comprising a plurality of types of data areas requiring different optimal read powers, the information storage medium having recorded thereon different optimal read power information respectively specifying the different optimal read powers for the plurality of types of data areas, the apparatus comprising:

a pickup unit that emits a light beam onto the information storage medium during a data reproducing operation of the apparatus, receives a reflected light beam from the information storage medium, and outputs the reflected light beam, the reflected light beam being produced by the information storage medium reflecting the light beam emitted from the pickup unit, the pickup unit receiving a control signal that controls a read power of the light beam during the data reproducing operation;

a signal processing unit that that receives the reflected light beam from the pickup unit, detects a data reproduction signal from the reflected light beam, and outputs the data reproduction signal, the data reproduction signal including the different optimal read power information recorded on the information storage medium; and

a control unit that receives the data reproduction signal from the signal processing unit, stores the different optimal read power information included in the data reproduction signal, generates a control signal to control the read power of the light beam emitted from the pickup unit to be a respective one of the different optimal read powers specified by a respective one of the different optimal read power information corresponding to a type of a data area of the information storage medium from data is to be reproduced, and outputs the control signal to the pickup unit.

- 11. (New) The apparatus of claim 10, wherein the plurality of types of data areas of the information storage medium comprise a read-only data area and a writable data area.
- 12. (New) The apparatus of claim 11, wherein the information storage medium is a super-resolution information storage medium from which data is reproduced using a super-resolution effect.
- 13. (New) The apparatus of claim 10, wherein the plurality of types of data areas comprise a super-resolution data area from which data is reproduced using a super-resolution effect, and a normal data area from which data is reproduced without using the super-resolution effect.
- 14. (New) The apparatus of claim 10, wherein the information storage medium further comprises a lead-in area and a lead-out area; and

wherein the different optimal read power information are recorded in the lead-in area and/or the lead-out area.

REMARKS

In accordance with the foregoing, the title, the abstract, the specification, Figs. 2, 4, and 6, and claims 1-9 have been amended, and new claims 10-14 have been added. Claims 1-14 are pending, with claims 1, 7, and 10 being independent. No new matter is presented in this amendment.

Substitute Specification

Pursuant to 37 CFR 1.125(b) and MPEP 608.01(q), the original specification has been replaced by the attached substitute specification to correct errors in the original specification and improve its form.

Pursuant to 37 CFR 1.125(c) and MPEP 608.01(q), the substitute specification is in clean form without markings and is accompanied by a marked-up copy of the substitute specification showing all of the changes relative to the original specification, with added text being shown by <u>underlining</u> and deleted text being shown by <u>strikethrough</u>.

Pursuant to 37 CFR 1.125(b) and MPEP 608.01(q), the substitute specification includes no new matter.

It is respectfully requested that the substitute specification be entered, and that the Examiner confirm that this has been done in the first Office Action.

Drawing Amendments

The sheet numbers "1/4", etc., that appeared at the top of the original sheets of drawings have been deleted in the replacement sheets of drawings.

Fig. 2 has been amended to change "CN" to "CNR".

Fig. 4 has been amended to change "READ-IN AREA" to "LEAD-IN AREA" and to change "RE-WRITABLE ZONE" to "REWRITABLE ZONE".

Fig. 6 has been amended to add arrowheads on the light rays incident on the lens 57. The reference number identifying the operation circuit has been changed from 58 to 59. A photodetector 58 has been added between the lens 57 and the operation circuit 59 to be

consistent with paragraph [0030] of the substitute specification. The light rays exiting from the lens 57 have been amended to be focused on the photodetector 58 as known in the art. The output of the second channel Ch2 connected to the input of the control circuit 70 has been deleted, and an output of the first channel Ch1 has been added and has been connected to the input of the control unit 70 because, as known in the art, the sum signal that is detected by the first channel Ch1 is a data reproduction signal and thus contains the optimal read power information for the read-only area and the writable area that are obtained from the lead-in area and/or the lead-out area of the hybrid information storage medium, and are to be stored in a memory (not shown) in the control unit 70 as described in paragraph [0033] of the substitute specification. The arrowhead at the lower right corner of the figure where the input line to the control unit 70 turns to the left has been deleted. An arrowhead has been added to the input line to the control unit 70 at the control unit 70.

Conclusion

There being no outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this preliminary amendment, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with the filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date:

By:

Michael D. Stein

Registration No. 37,240

1400 Eye St., NW

Suite 300

Washington, D.C. 20005 Telephone: (202) 216-9505 Facsimile: (202) 216-9510

Attachments